


claims 1, 4, 7, 11, 15, 20 and 26-28 have been amended herewith. For the reasons set forth in detail below claims 1-34 are now believed to be in condition for allowance.

Paragraphs 4-7 of the Official Action reject independent claims 1, 2, 4, 7, 11, 15, 20 and 26-28 and dependent claims 10, 14, 18, 19 and 23-25 under the judicially created doctrine of obviousness-type double patenting based on claims 5, 6, 24 and 25 of U.S. Patent No. 6,180,439 to Yamazaki et al. (Yamazaki). Further, paragraph 8 of the Official Action rejects dependent claims 3, 6, 9, 13, 17, 22 and 29-31 under the judicially created doctrine of obviousness-type double patenting based on the combination of claims 4 and 5 of Yamazaki and U.S. Patent No. 4,466,073 to Boyan et al. (Boyan). Further, paragraphs 9 and 10 of the Official Action reject claims 5, 8, 12, 16, 21 and 32-34 under the doctrine of obviousness-type double patenting based on the combination of claims 4 and 5 of Yamazaki and U.S. Patent No. 5,550,070 to Funai et al. (Funai).

In response, independent claims 1, 2, 4, 7, 11, 15, 20 and 26-28 have been amended herewith to recite the step of irradiation of laser light being performed after forming said semiconductor film. It is respectfully submitted that the prior art, either alone or in combination, does not teach, disclose or suggest at least this feature of the present invention, either explicitly or inherently. Favorable reconsideration of the outstanding double patenting rejections is therefore respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,



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MARKED-UP VERSION OF THE CLAIMS

IN THE CLAIMS:

Please amend claims 1, 4, 7, 11, 15, 20 and 26-28 as follows:

1. (Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film on an insulating surface; and

forming a semiconductor island having a tapered shape by patterning said semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying [surface; and] surface,

[irradiating laser light to said semiconductor island]

wherein irradiation of laser light is performed after forming said semiconductor film.

4. (Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film on an insulating surface;

crystallizing said semiconductor film by heating; and

forming a semiconductor island having a tapered shape by patterning [the crystallized semiconductor film] said semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying [surface; and] surface,

[irradiating laser light to said semiconductor island]

wherein irradiation of laser light is performed after forming said semiconductor film.

7. (Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film on an insulating surface;

providing a crystallization promoting material onto said semiconductor film;

MARKED-UP VERSION OF THE CLAIMS

crystallizing said semiconductor film by heating; and
forming a semiconductor island having a tapered shape by patterning [the
crystallized semiconductor film] said semiconductor film, said tapered shape having an
angle within a range of 20° to 50° between a side thereof and an underlying [surface;
and] surface.

[irradiating laser light to said semiconductor island]
wherein irradiation of laser light is performed after forming said
semiconductor film.

11. (Amended) A method for manufacturing a semiconductor device
comprising the steps of:

forming a semiconductor film on an insulating surface;
crystallizing said semiconductor film by a first heating;
forming a semiconductor island having a tapered shape by patterning [the
crystallized semiconductor film] said semiconductor film, said tapered shape having an
angle within a range of 20° to 50° between a side thereof and an underlying surface;
and

[irradiating laser light to said semiconductor island; and]
forming a silicon oxide film on a surface of said semiconductor island by a
second heating,

wherein irradiation of laser light is performed after forming said
semiconductor film.

15. (Amended) A method for manufacturing a semiconductor device
comprising the steps of:

forming a semiconductor film on an insulating surface;
providing a crystallization promoting material onto said semiconductor film;
crystallizing said semiconductor film by a first heating;

MARKED-UP VERSION OF THE CLAIMS

forming a semiconductor island having a tapered shape by patterning [the crystallized semiconductor film] said semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying surface; and

[irradiating laser light to said semiconductor island; and]

forming a silicon oxide film on a surface of said semiconductor island by a second heating,

wherein irradiation of laser light is performed after forming said semiconductor film.

20. (Amended) A method for manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film on an insulating surface;

providing a crystallization promoting material onto said semiconductor film;

crystallizing said semiconductor film by a first heating;

forming a semiconductor island having a tapered shape by patterning [the crystallized semiconductor film] said semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying surface; and

[irradiating laser light to said semiconductor island; and]

reducing said crystallization promoting material existing within said semiconductor island by a second heating,

wherein irradiation of laser light is performed after forming said semiconductor film.

26. (Amended) A method for manufacturing a thin film transistor, comprising the steps of:

forming a semiconductor film on an insulating surface;

crystallizing said semiconductor film;

MARKED-UP VERSION OF THE CLAIMS

forming a semiconductor island having a tapered shape by patterning said semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying surface; and

[irradiating laser light to said semiconductor island; and]

forming an insulating film on said semiconductor [island] island,

wherein irradiation of laser light is performed after forming said semiconductor film.

27. (Amended) A method for manufacturing a thin film transistor, comprising the steps of:

forming a semiconductor film on an insulating surface;

forming a semiconductor island having a tapered shape by patterning said semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying surface; and

[irradiating laser light to said semiconductor island; and]

forming an insulating film on said semiconductor [island] island,

wherein irradiation of laser light is performed after forming said semiconductor film.

28. (Amended) A method for manufacturing a thin film transistor, comprising the steps of:

forming a semiconductor film on an insulating surface;

crystallizing said semiconductor film; and

forming a semiconductor island having a tapered shape by patterning said semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying [surface; and] surface,

[irradiating laser light to a said semiconductor island]

wherein irradiation of laser light is performed after forming said semiconductor film.